

## ABSTRACT

This invention is intended to provide a damping device capable of conducting highly precise damping control. To attain this object, this invention is a damping device used in a machine 10 which includes a rotating object 30 and a motor 28 rotating the rotating object 30, wherein the damping device includes: a vibration damper 40 filled with an electroviscous fluid 44 having a viscosity changing according to a value of a voltage applied to the electroviscous fluid 44, and rotatably supporting at least a part of the rotating object 30 in the electroviscous fluid 44; a voltage applicator 60 applying the voltage to the electroviscous fluid 44 in the vibration damper 40; and a controller 24 controlling an operation of the voltage applicator 60 so that an optimum voltage, at which the viscosity of the electroviscous fluid 44 absorbing a vibration of the rotating object 30 most effectively is obtained, can be applied to the electroviscous fluid 44 in the vibration damper 40 in accordance with a rotating speed of the rotating object 30.